Getting started with critical thinking

- Process - gather together all you have read, seen, heard or which you have taken part in
- Understand - sort out the key points, arguments and evidence
- Analyse - determine how key elements relate to one another
- Compare - explore similarities and differences in ideas you encounter
- Synthesise - bring together different resources to support an argument you are constructing. Logical connections between these resources will help to support your argument
- Evaluate - how important is an idea in terms of what you are investigating, on what evidence it is based, and how it relates to other relevant ideas
- Apply - use the understanding from your critical evaluation in response to questions and assignments
- Justify - use critical thinking to develop arguments, draw conclusions and identify implications

Critical thinking also includes:

- Attention to detail - small clues may inform the overall issue
- Identifying trends and patterns - in analysis of data, or noting repetition and similarity
- Repetition - go over the same text several times to make sure nothing has been missed
- Taking different perspectives - look at the same information from different points of view
- Objectivity - putting your own preferences, interests to one side
- Considering implications - a good idea in the short term may be less preferable in the long term

Identifying arguments

An argument includes:

- A position or a point of view
- Reasons to support a conclusion
- A line of reasoning - a set of reasons in logical order
- Persuasion - to move the audience to a point of view
- Signal words and phrases - to help follow the direction of the argument
- Conclusion - the position the author wants you to accept
Assumptions and arguments may not be obvious:

- Assumptions are anything taken for granted in the presentation of an argument
- They may not be stated explicitly
- They are based on what the reader might reasonably be expected to know
- Without them the same conclusion would not be possible

Sources of evidence

Primary sources - originate from the time and place of events being investigated:

- Contemporary letters, documents, photographs
- Newspapers, books, materials published at the time
- Media footage, artefacts, raw data
- Autobiographies
- Responses to surveys and questionnaires etc

Secondary sources - written about the event, usually some time later:

- Books, articles, web pages, documentaries
- Interviews with people reporting what they heard
- Biographies
- Papers and reports using the results of surveys, questionnaires and experiments

Reputable sources - is it worth reading?

- Has it been recommended by a trustworthy source
- If a journal article, is it from a peer-reviewed journal
- Is there a clear line of reasoning, with supporting evidence
- Does it include a detailed list of references, indicating thorough research?
Critical thinking when writing

- **Content** - most of the text is used to present a case through providing reasons, using evidence, evaluating alternative arguments and forming judgements
- **Audience** - how will the message be interpreted by others, especially those with a different point of view?
- **Clarity** - needs to convince the reader, so it should be easy to see the point
- **Analysis** - look at the evidence critically, weighing strengths and weaknesses, so that path to conclusion is clear
- **Selection** - important not to obscure the main argument: examine the most important, possibly the most controversial, points in most detail
- **Sequence** - order information in the way most helpful to the reader, showing how each point links to the main argument
- **Best order** - usually presenting points in support of the argument first, so that subsequent reasoning is interpreted from the perspective of the first argument
- **Group similar points** - locate these near each other in the writing
- **Signposting** - use words and phrases rather than graphical devices such as bold, highlight or arrows

Critical reflection

Typical characteristics include:

- **Selection of an aspect of experience for detailed analysis**
- **Changing perspective** - look at the experience from different angles
- **Returning to experience** - as often as is relevant
- **Analysis of own role** - reasons for, and consequences of, personal action
- **Drawing on received wisdom** - using theory, research, professional knowledge
- **Deepening understanding** - looking for meaning, recognising and drawing on significance
- **Using insights to effect change** - how will this impact on future performance?